

Amendment (D)

Version with markings to show changes made

CLAIMS

I claim

(original) 1 A grand piano action

comprising a flange carrying a hammer shank carrying a piano hammer and a knuckle; a wippen lever carrying a jack; said jack having an arm; said wippen lever being supported by a capstan on a piano key; ~~[said piano key carrying]~~ ~~[a hammer back check];~~ said arm of said jack including an elastic means being connected to said flange; ~~[the lifting surface of]~~ said jack being in contact with said knuckle; upon depressing said piano key said jack being lifted along with said elastic means shortening said elastic means into a relaxed disabled state; ~~[said]~~ ~~[lifting surface of]~~ said jack after propelling said piano hammer escaping from said knuckle without excessive friction when said arm of said jack hitting the escapement let off button; upon releasing said piano key said wippen lever lowering effectuating said elastic means to revert from said relaxed disabled state to its normal attitude effectuating said jack back into said contact with said knuckle.

(original) 2 The grand piano action according to claim 1 wherein said elastic means being dependent from a regulating screw carried by said flange.

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(original) 3 A grand piano action

comprising a flange carrying a hammer shank carrying a piano hammer and a knuckle; a wippen lever carrying a jack; said jack having an arm; said wippen lever being supported by a capstan on a piano key; ~~[said piano key carrying]~~ ~~[a hammer back check;]~~ said arm of said jack including a convoluted spring means being connected to said flange; ~~[the lifting surface]~~ ~~[of]~~ said jack being in contact with said knuckle; upon depressing said piano key said jack being lifted along with said convoluted spring means shortening said convoluted spring means into a relaxed disabled state; ~~[said lifting surface of]~~ said jack escaping from said knuckle when said arm of said jack hitting the escapement let off button without excessive friction.

(original) 4 The grand piano action according to claim 3 wherein said convoluted spring means being dependent from a regulating screw carried by said flange; the first end of said convoluted spring means being in a hole along said regulating screw; ~~[the very end]~~ said first end being bent over the end of said regulating screw; the [other] second end of said [regulating screw] convoluted spring means being hooked onto said arm of said jack.

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(original) 5 A grand piano action

comprising a flange carrying a hammer shank carrying a piano hammer and a knuckle; a wippen lever carrying a jack, said jack having an arm; said arm opposing an escapement let off button; said wippen lever being supported by a capstan on a piano key, ~~[said piano key carrying a hammer back check]~~ a spring means being carried by a rail, said spring means supporting said arm of said jack; ~~[a lifting surface of]~~ said jack being in contact with said knuckle; upon depressing said piano key said arm of said jack being lifted together with said spring means effecting said spring means to turn inert, permitting ~~[said lifting surface]~~ ~~of~~ said jack to escape from said knuckle with ease during said arm of said jack hitting said escapement let off button.

(original) 6 The grand piano action according to claim 5 wherein said arm of said jack carrying a regulating button resting on said spring means carried by said rail.

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- (new) 7 The grand piano action according to claim 1 wherein said arm of said jack including said elastic means connected to said flange being a band, said arm of said jack being inside of said band.
- (new) 8 The grand piano action according to claim 2 wherein said elastic means depending from said regulating screw carried by said flange being a band depending from a wire being in a hole along said regulating screw, the end of said wire being bent over said regulating screw, the arm of the jack being inside of said band.
- (new) 9 The grand piano action according to claim 4 wherein said first end of said convoluted spring means in said hole along said regulating screw extending along said hole being straight.
- (new) 10 The grand piano action according to claim 4 wherein said convoluted spring means being of a substantially light gauge.
- (new) 11 The grand piano action according to claim 8 wherein said band being made of rubber.
- (new) 12 The grand piano action according to claim 8 wherein said band being made of resilient plastic.
- (new) 13 The grand piano action according to claim 5 wherein said spring means carried by said rail being in a groove under said arm of said jack supporting said jack.

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- (new) 14 The grand piano action according to claim 1 wherein said arm of said jack including said elastic means being connected to the repetition lever supporting said knuckle carried by said hammer shank.
- (new) 15 The grand piano action according to claim 3 wherein said arm of said jack including said convoluted spring means being connected to the repetition lever supporting said knuckle carried by said hammer shank.
- (new) 16 The grand piano action according to claim 15 wherein said arm of said jack including a regulating screw, said convoluted spring means connected to said repetition lever connecting to said regulating screw.
- (new) 17 The grand piano action according to claim 14 wherein said elastic means being a band stretched about the end of said repetition lever and about said arm of said jack.
- (new) 18 The grand piano action according to claim 17 wherein said band being attached to said repetition lever, said arm of said jack being inside of said band.
- (new) 19 The grand piano action according to claim 17 wherein said band being made of rubber.
- (new) 20 The grand piano action according to claim 17 wherein said band being made of resilient plastic.
- (new) 21 In a traditional grand piano action wherein a [~~resilient~~] flexible means dependent from above supporting the arm of the jack to eliminate the excessive friction at the jack and knuckle interface.
- (new) 22 in a traditional grand piano action wherein a resilient means below the arm of the jack positioned on a stationary member supporting said arm of said jack to eliminate the excessive friction at the jack and knuckle interface.

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- (new) 23 The grand piano action according to claim 1 wherein said flange including a band formed of a convoluted spring means; said arm of said jack being inside of said band supporting said jack.
- (new) 24 The grand piano action according to claim 23 wherein said flange further including a regulating screw having a hole along said regulating screw; a wire inside said hole having both ends bent, one end carrying said band formed of said convoluted spring means enveloping said arm of said jack. supporting said jack.
- (new) 25 The grand piano action according to claim 9 wherein said first end of said convoluted spring means in said hole along said regulating screw extending along said hole being straight; the diameter of the coils of said convoluted spring means being substantially greater than the diameter of said regulating screw.
- (new) 26 The grand piano action according to claim 4 wherein said first end of said convoluted spring means being in a depression around said regulating screw, said ~~other~~ second end of said convoluted spring means being hooked onto said arm of said jack.
- (new) 27 The grand piano action according to claim 1 wherein said wippen lever including a spring means supporting the undersurface of said arm, the end of said spring means opposing a regulating button; said arm opposing said escapement let off button.

(new) 28 A grand piano action

comprising a flange carried by a rail, said flange carrying a regulating drop screw and pivoting a hammer shank carrying a piano hammer, a knuckle depending from said hammer shank, a wippen lever pivoting a jack, said jack having an arm opposing an escapement letoff button, said wippen lever being supported by a capstan screw on the piano key, an upstanding portion of said wippen lever pivoting a repetition lever, a spring carried by said upstanding portion supporting said repetition lever, said knuckle resting on said repetition lever, a flexible means connecting said repetition lever to said arm of said jack, upon depression of said piano key said jack lifting said knuckle elevating said piano hammer towards a tensioned string, said repetition lever hitting said regulating drop screw effectuating said flexible means into a relaxed state permitting said jack to escape from said knuckle with ease during said arm of said jack hitting said escapement letoff button, upon partial release of said piano key said jack being lowered to under said knuckle for repetition by said ~~[flexible means supporting said arm]~~ ~~[returning to its normal at rest attitude with said jack under]~~ ~~[said knuckle in its at rest position.]~~ repetition lever in combination with said regulating drop screw.

(new) 29 The grand piano action according to claim 28 wherein said arm of said jack being connected to said repetition lever by a string.

(new) 30 The grand piano action according to claim 29 wherein said string being formed into a band enveloping said arm and said repetition lever.

(new) 31 The grand piano action according to claim 28 wherein said arm of said jack being connected to said repetition lever by a chain.

(new) 32 The grand piano action according to claim 31 wherein said chain connecting said jack to said repetition lever being formed into a band enveloping said arm and said repetition lever.

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- (new) 33 The grand piano action according to claim 28 wherein said flange pivoting said hammer shank including a regulating screw carrying said flexible means.
- (new) 34 The grand piano action according to claim 33 wherein said regulating screw having a hole along said screw, a wire in said hole having its ends bent, the lower bent end of said wire carrying said flexible means connected to the arm of the jack.
- (new) 35 The grand piano action according to claim 28 wherein said repetition lever connecting to said arm of said jack by a tape.
- (new) 36 The grand piano action according to claim 28 wherein said flange pivoting said hammer shank including a tape supporting said arm of said jack.
- (new) 37 The grand piano action according to claim 28 wherein said repetition lever hitting said regulating drop screw effectuating said flexible means to deform into said relaxed state disabling said flexible means permitting said jack to escape from said knuckle excessive friction free effectuating said piano key to be light.